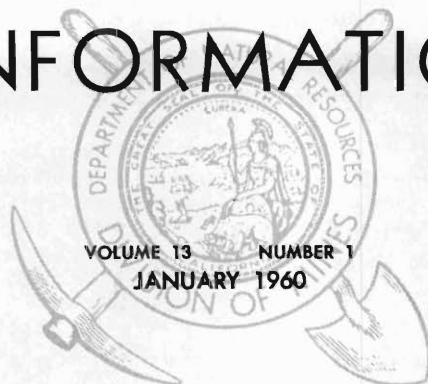


MINERAL INFORMATION SERVICE

STATE OF CALIFORNIA

DIVISION OF MINES



Geologic Sketch of the Southern Coast Ranges

by GORDON B. OAKESHOTT

The Division of Mines has recently published the San Luis Obispo and Santa Cruz sheets of the new, colored, 1:250,000-scale State Geologic Map. As this issue of Mineral Information Service goes to press, the Santa Maria sheet is expected shortly; the San Francisco sheet is nearing completion, and San Jose is in the planning stage. These five sheets encompass the Southern Coast Ranges, which extend from the Golden Gate-San Pablo Bay-Suisun Bay depression on the north to the Santa Ynez River in Santa Barbara County on the south, and from the Pacific Ocean on

the west to the San Joaquin Valley on the east. The Southern Coast Ranges make up a northwestward-trending geographic and geologic province of broadly similar characteristics but one which shows great complexity in the details of its geologic history and geographic development. Climate is of the Mediterranean type, with warm, dry summers and mild winters; rainfall is moderately low in most of the area but ranges from as little as 5 inches in the eastern foothills on the margin of the San Joaquin Valley to as much as 100 inches, in some years, at Big Basin, north of Santa Cruz.



Looking south at Morro Bay. Morro Rock in the bay at the extreme right, is one of a linear series of dark volcanic necks which can be seen trending eastward across the photo. Photo by John S. Shelton.